WHAT IS CLAIMED IS:

- 1. Bacterial artificial chromosome vector characterized in that it comprises essentially the entire genome of an EHV strain.
- 2. The artificial chromosome vector according to claim 1, characterized in that the EHV is EHV-1.
- 3. The artificial chromosome vector according to claim 1, characterized in that the EHV is EHV-4.
- 4. The artificial chromosome vector according to claim 1, characterized in that the EHV strain is RacH.
- 5. The artificial chromosome vector according to claim 4, chraterized in that it is the vector with the accession No. ECACC 01032704.
- 6. The artificial chromosome vector according to claim 1, characterized in that the EHV strain is lacking the glycoprotein gB.
- 7. The artificial chromosome vector according to claim 1, characterized in that the EHV strain is lacking the glycoprotein gC.
- 8. The artificial chromosome vector according to claim 1, characterized in that the EHV strain is lacking the glycoprotein gD.
- 9. The artificial chromosome vector according to claim 1, characterized in that the EHV strain is lacking the glycoprotein gE.
- 10. The artificial chromosome vector according to claim 1, characterized in that the EHV strain is lacking the glycoprotein gG.
- 11. The artificial chromosome vector according to claim 1, characterized in that the EHV strain is lacking the glycoprotein gH.

- 12. The artificial chromosome vector according to claim 1, characterized in that the EHV strain is lacking the glycoprotein gI.
- 13. The artificial chromosome vector according to claim 1, characterized in that the EHV strain is lacking the glycoprotein gK.
- 14. The artificial chromosome vector according to claim 1, characterized in that the EHV strain is lacking the glycoprotein gL.
- 15. The artificial chromosome vector according to claim 1, characterized in that the EHV strain is lacking the glycoprotein gM.
- 16. The artificial chromosome vector according to claim 1, characterized in that the EHV strain is lacking the glycoprotein gp1/2.
- 17. A polynucleotide encoding an artificial chromosome vector, which vector is characterized in that it comprises essentially the entire genome of an EHV strain, or EHV contained in the vector.
- 18. A method for generating infectious EHV which comprises using an artificial chromosome vector, which vector is characterized in that it comprises essentially the entire genome of an EHV strain.
- 19. A method for generating infectious EHV which comprises using the polynucleotide as according to claim 18.
- 20. A method for generating EHV which comprises infecting a suitable cell line with the artificial chromosome vector according to claim 1, allowing the vector to replicate and shed virus, collecting the shed virus and purifying the collected virus.
- 21. A method for generating an attenuated EHV which comprises modifying by molecular biology techniques the EHV sequence contained in an artificial chromosome vector according to claim 1.

- 22. The method according to claim 22 wherein a foreign sequence of another viral, bacterial or parasitic pathogen is added to the artificial chromosome vector.
- 23. A method for generating a virulent EHV which comprises modifying by molecular biology techniques the EHV sequence contained in an artificial chromosome vector according to claim 1.
- 24. The method according to claim 23 wherein a foreign sequence of another viral, bacterial or parasitic pathogen is added to the artificial chromosome vector.